



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/476,372	01/03/2000	BYOUNG-CHUL SOHN	Q57096	7742

7590

12/05/2002

SUGHRUE MION ZINN MACPEAK & SEAS PLLC
2100 PENNSYLVANIA AVENUE NW
WASHINGTON, DC 200373202

EXAMINER

MEHRPOUR, NAGHMEH

ART UNIT

PAPER NUMBER

2685

DATE MAILED: 12/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/476,372

Applicant(s)
Byoung-chul Sohl

Examiner
Naghmeh Mehrpour

Art Unit
2685



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Sep 19, 2002
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 5 is/are rejected.
- 7) ☒ Claim(s) 4 and 6 is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Art Unit:

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. **Claim 1**, rejected under 35 U.S.C. 102(b) as being anticipated by Kondo Haruo

JP5091009 (Nippon Telegraph).

Regarding **Claim 1**, Kondo teaches a wireless resource allocation method in a wireless communication system including a plurality of wireless terminals and a single access point, the method comprising the steps of: (a) allocating a wireless resource to a corresponding wireless terminal and receiving data from said wireless terminal in said access point; (b) performing a check to determine whether there is an error in said data which was received from said wireless terminal in said access point in the step (a), and © sending an error occurrence message and allocating a wireless resource for retransmission of data to said wireless terminal simultaneously when the access point detects a data error in the step (b) (Abstract). Kondo does not mention that assess point have a bridge function. However Kondo's method disclose that base station checks the error and send an error occurrence massage at the time that an error detected. Therefore, Kondo inherently teaches a bridge function.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit:

3. **Claims 2-3, 5**, are rejected under 35 U.S.C. 103(a) as being unpatentable over ~~the~~ ~~admitted prior art in view of~~ Kondo Haruo JP5091009 (Nippon Telegraph) in view of Akerberg. (US Patent Number 6,483,826 B1).

Regarding **Claim 2**, Kondo does not show that a wireless resource allocation method wherein, in the step © said error occurrence message is sent to the corresponding wireless terminal while said wireless resource for retransmission is allocated to the corresponding wireless terminal during a down-link period (abstract) . Kondo does not show that one frame comprising the down-link period and an up-link period. However Akerberg teaches that one frame comprising the down-link period and an up-link period (Column 7 lines 1-5), in case of error each Mobil by transmitting a message to request the base station for allocation of data transmission, increasing delay and decreasing an actual data transmission. Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to use above teaching of Akerberg to Kondo, in order to minimize the deterioration in the transmission efficiency.

Regarding **Claim 3**, Kondo fails to show that a wireless resource allocation method wherein said downlink period comprises a preamble for synchronization, a broadcast period, and a download reservation period. However Akerberg teaches a wireless resource allocation method wherein said downlink period comprises a preamble for synchronization, a broadcast period, and a download reservation period (Column 8 lines 53-67, Column 9 lines 1-10). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to use above teaching of

Art Unit:

Akerberg to Kondo, in order to reduce transmission delay and to prevent decreasing an actual data transmission rate.

Regarding **Claim 5**, Kondo fails to show that a wireless resource allocation method wherein during said down-link period, said access point transmits a broadcast message and various control information. However Akerberg teaches a wireless resource allocation method wherein during said down-link period, said access point transmits a broadcast message and various control information (Column 8 lines 53-67, Column 9 lines 1-10). Therefore, it would have been obvious to ordinary skill in the art at the time the invention was made to use above teaching of Akerberg to Kondo, in order to provide a communication system with better performance by reducing delay in transmission.

Allowable Subject Matter

4. **Claims 4, 6**, are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5. Applicant's arguments filed 9/19/02 have been fully considered but they are not persuasive. Regarding Claim 1, Kondo teaches a system that the mobile station 41 sends data in allocation time slot while dividing the data into plural packets, a base station 42 sends a confirmation signal to the mobile, and when an **unreception packet is existence** in base station 42 (another words to base station check the error, and base station check the error occurrence) or when mobile 41 does

Art Unit:

not receive the confirmation, or when unreception packet is received by base station, the base station informs the time slot requires for retransmission (base station sends a messages to mobile that error occur, and ask for retransmission). Another word when base station Informs the mobile of the time slot, means retransmit in another time slot, because error occurs. Therefore Kondo and applicant's base station both sends one message to mobile at the time of error occupance, and they both on that message ask for retransmission of the data.

Response to Arguments

6. Applicant's arguments with respect to claims 2-3, 5, have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. **Any responses to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications indented for entry)

Or:

(703) 308-6306, (for informal or draft communications, please label

“PROPOSED” or “DRAFT”)

Hand-delivered responses should be brought to Crystal Park II. 2121 Crystal Drive, Arlington. Va., sixth Floor (Receptionist).

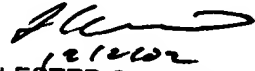
Art Unit:

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Melody Mehrpour whose telephone number is (703) 308-7159. The examiner can normally be reached on Monday through Thursday (first week of bi-week) and Monday through Friday (second week of bi-week) from 6:30 a.m. to 5:00 p.m.

If attempt to reach the examiner are unsuccessful the examiner's supervisor, Edward F. Urban can be reached (703)305-4385.

NM

Dec 2, 2002


LESTER G. KINCAID
PRIMARY EXAMINER